

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
4 November 2004 (04.11.2004)

PCT

(10) International Publication Number
WO 2004/095169 A3

(51) International Patent Classification⁷: **G06K 7/08**, 19/06

(21) International Application Number:

PCT/US2004/010951

(22) International Filing Date: 19 April 2004 (19.04.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/464,123

21 April 2003 (21.04.2003) US

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

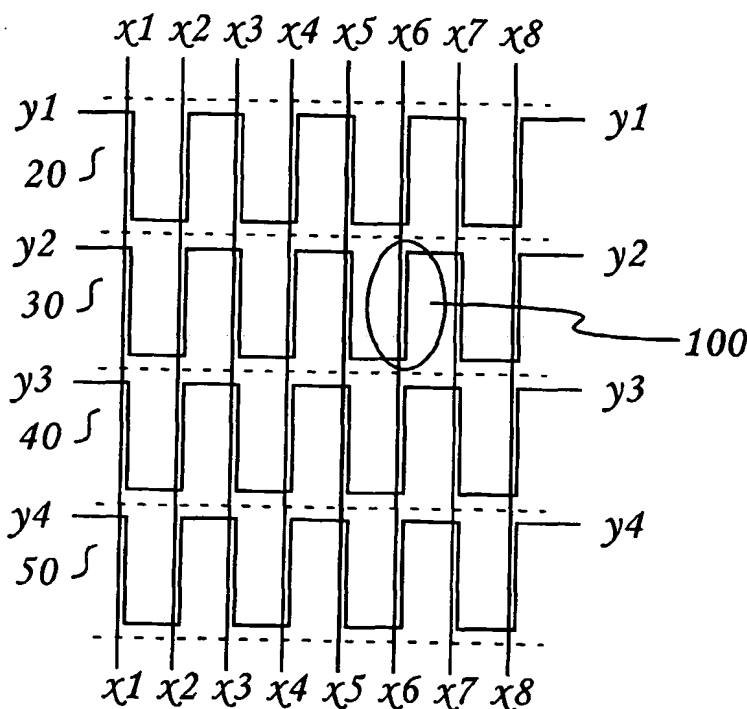
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

[Continued on next page]

(54) Title: METHOD AND SYSTEM FOR DATA WRITING/READING ONTO/FROM AND EMULATING A MAGNETIC STRIPE



(57) Abstract: A method of writing data on magnetic stripe of a smart card by imposing a magnetic field of a given polarity on each selected segment of the magnetic stripe, such that data on the magnetic stripe can be read by a magnetic card reader and interpreted as digital bits. The method includes providing a multi-dimensional conductor array placed proximate to the magnetic stripe, the number of conductors in the array is considerably smaller than the number of segments, and each segment is associated with two or more conductors. The method further includes providing current drivers for sending currents in a controlled direction through the conductor array. The system further includes sending currents, using said current drivers, through conductors of the array, such that for each one of the selected segment composite currents flowing through its associated two conductors overcome the coercivity of the segment on the magnetic stripe.

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(88) Date of publication of the international search report:
10 March 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/10951

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06K 7/08, 19/06

US CL : 235/449,492,493

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 235/449,492,493, 379-380,441,494; 360/327.33,322

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 6,206,293 B1 (GUTMAN et al) 27 March 2001 (27.05.2001), column 3, lines 49+; column 4, lines 1-7 and 25-30; column 6, lines 1-14 and 30-33.	1,2,4-9,12,13,16-19, 22-24,28-32,42-46,49- 86

Y		3,10-11,14,15,20- 21,25-27,33-41,47-48
Y	US 5,650,606 A (BAUS, Jr.) 22 July 1997, column 4, lines 65+.	3,14,15,27,35-41
Y	US 4,634,848 A (SHINOHARA et al) 06 January 1987, column 2, lines 2-6.	10,11,20,21,25,26,33, 34,47,48

☐ Further documents are listed in the continuation of Box C.

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"&"

document member of the same patent family

Date of the actual completion of the international search

13 October 2004 (13.10.2004)

Date of mailing of the international search report

13 JAN 2005

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